

Riddle of the North

Radiogram to Milwaukee Journal, Milwaukee Sentinel and Wisconsin News:

The Isle Royale Expedition is functioning perfectly and results thus far greatly exceed our expectations. This island is the riddle of the North and its archeological mysteries are legion. No scientific expedition so well financed and equipped has ever before visited the island. The palatial yachts Naroca and Margo not only furnish living quarters, but quick transportation to the many places of interest along the miles of shoreline of this enchanted isle.

The year is 1928, and the Isle Royale Expedition has been spending the summer at work on this archipelago in the midst of Lake Superior. Archeologically they have accomplished much. Evidence regarding the prehistoric inhabitants is accumulating. The team members, who include both professional and amateur archeologists, are making national news headlines as they report, via radiogram, on their progress and adventures.

On this warm August evening, *Naroca* and *Margo* swing gently at anchor in McCargoe Cove. Along the shore a moose wades through the reeds, gulls swoop and weave above, and the rock ridges on each side hold the harbor in forest-bound serenity.

The expedition members are relaxing after a long day of exploring the island's largest assemblage of prehistoric mining pits. The evening's banter has shifted from academic discussion to an issue undreamed of when the

Printing of The Greenstone courtesy of the Isle Royale and Keweenaw Parks Association



expedition was formed—that the necessity of saving this place of beauty for the benefit of those to come is paramount. With sunset as their backdrop, the team huddles to compose their thoughts. Later that evening, they send a radiogram to President Calvin Coolidge:

Mr. President...preserve forever this northern land of woods and lovely waters for the people of this country. What scientists call "the riddle of the North" with its 10,000 ancient copper mines, with its untouched wilderness of evergreens and birches and its scores of inland lakes, with its rugged shores and its bewilderingly beautiful estuaries... with its lowlands where thousands of moose are found—all this be preserved inviolable for the present and future generations of America and the world. It should be preserved for its natural grandeur and the beauty of its waters. Its profound archeological, geological and historical interest, its unique scenic beauty, its unparalleled wild life, its value as a health refuge from the heats and fevers of the country give weight to our suggestion.

The members of the expedition had lent their weight to growing public opinion that Isle Royale was, in so many ways, worthy of national park status. The following year, National Park Service representatives visited the island, evaluating its suitability for parkhood. In 1931, Isle Royale National Park was authorized.

As they departed the island, the expedition members—like today's visitors—were full of plans for future adventures. They had come to the island with specific expectations. They did not discover answers to all their questions. They had not solved the "riddle of the North," but they were not disappointed. They had found something else—something deeper, something unforeseen. The archipelago had worked its magic on them, and they ended up finding their park.

You may come to the park to hike the trails or fish the waters, to see moose or to find solitude. Whatever your reasons, when you leave the mainland, leave your expectations behind. Open yourself to the journey and you, too, may find your park—and yourself.

Val Martin Park Ranger

CELEBRATING 100 YEARS

On August 25, 1916, President Woodrow Wilson signed the act creating the National Park Service—responsible for protecting the forty national parks and monuments then in existence, and those yet to be established.

Today, more than four hundred sites make up the National Park System. From the grandeur of Yosemite's mountain vistas, to the ancient dwellings of Mesa Verde; from the Statue of Liberty to the wild islands of Isle Royale, these sites were safeguarded for their superlative natural, historical, cultural and recreational values. Together they represent the cumulative expression of a single national heritage.

Since its inception, the National Park Service has followed the timeless guidance of the Organic Act, which defines its two "fundamental purposes":

To conserve the scenery and the natural and historic objects and the wildlife

To provide for their enjoyment in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Over the last hundred years, the Park Service has evolved to address new challenges in an ever-changing world. But the original mission remains at its heart.

The National Park Service holds these places in trust for the people. The parks belong to you. Each of us should have the chance to stand where a milestone in our history has occurred, to reflect on and become connected to the past. We should have opportunities to be surrounded by beauty, to rediscover our spirit in wild places.

So go to the parks and celebrate the centennial of "America's Best Idea." Make a birthday wish for their future. Unwrap their wonders, and consider their values. You'll never open a better present.

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CENTENNIAL



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Contacts

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Fax: 906-482-8753 Website: www.nps.gov/isro

E-mail for General Information:

ISRO_ParkInfo@nps.gov

Emergency use only: (440) 546-5945 or

toll free 1-800-433-1986

Isle Royale and Keweenaw **Parks Association**

(Books, Maps, DVDs and Posters)

800 East Lakeshore Drive Houghton, MI 49931-1869

Phone: 800-678-6925; 906-482-3627

Website: www.irkpa.org E-mail: irkpa@irkpa.org

Rock Harbor Lodge

Summer

P. O. Box 605 Houghton, MI 49931-0605

Phone: 906-337-4993 Winter

Rock Harbor Lodge, P. O. Box 27, Mammoth Cave, KY 42259-0027

Phone & Toll-Free Reservations: 866-644-2003

Website:

www.RockHarborLodge.com

E-mail:

info@isleroyaleresort.com

Weather Forecasts for Isle Royale

www.crh.noaa.gov/mqt

Weather Radio Forecasts

- 162.400 MHz from Houghton, Michigan
- 162.475 MHz from Thunder Bay, Ontario, Canada.

Keweenaw Convention and Visitors Bureau

Phone: 888-766-0325 Website:

www.keweenaw.info

E-mail: info@keweenaw.info

Minnesota's Grand Marais Visitor Information Center

Phone: 888-922-5000

Website:

www.visitcookcounty.com

E-mail: info@visitcookcountv.com

Michigan Department of Natural Resources **Fishing License Purchase**

www.michigan.gov/dnr

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—Printed on recycled paper—

Did You Know?

The iconic National Park Service (NPS) arrowhead was authorized in 1951. Rooted in heraldic tradition, each element symbolizes a facet of the National Park System. Vegetation and wildlife are represented by two cherished species. The mountain and lake are emblematic of the scenic and recreational values of park lands and waters; the arrowhead outline of historical and archaeological ones. Test your knowledge of these symbols of "America's Best Idea."

- 1) Vegetation is represented by the most massive plant species on the planet which can be found in Yosemite and Kings Canyon National Parks and in this national park named for these big trees.
- 2) Many NPS sites preserve awe-inspiring mountain scenery. Soaring to a height of 20,320 feet, the highest peak in North America is within the boundaries of which national park?
- 3) Wildlife is represented by a bison. Which NPS site is the only place in North America where bison have lived continuously since prehistoric times?
- 4) Some NPS sites are more water than land. This national park is ninety-five percent underwater and protects coral reef and mangrove ecosystems.
- 5) NPS sites preserve stories of our past. Which NPS site protects approximately 4,000 archeological sites representing more than 10,000 years of human culture?

 Chaco Culture National Historical Park in New Mexico established in 1907 4) Biscayne Vational Park in Florida established in 1980 3) Yellowstone National Park in Montana/ Wyoming/Idaho established in 1872 z) Denali National Park in Alaska established in 1913 1) Sequoia National Park in California established in 1890

VNZMEKS



The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations.

Forever Resorts: Rock Harbor and Windigo

Lakeside Lodge Rooms

Sixty rooms are available; each accommodates four and offers private bath. Open 6/7 through night of 9/9.

Housekeeping Cabins

Twenty duplex cottages accommodate six and are furnished with utensils, dishware, private bath, double bed and one bunk bed. Open 5/27 through night of 9/9.

Gift Shop and Dockside Store

Gift Shop offers handcrafted gifts, apparel, photo supplies, postcards, souvenirs, daily fishing licenses, and tackle. The store offers groceries, freeze-dried foods, fishing tackle, stove fuel, camping, hiking, and boating accessories, showers, laundry facilities, and sundries. Gift Shop open 6/7 through 9/9; Dockside store open 5/27 through 9/9.

Lighthouse Restaurant and **Greenstone Grill**

Hearty meals, including fresh Lake Trout. Visitors welcome for breakfast, lunch, and dinner. Food service open 6/7 through breakfast 9/10.

Marina and Water Taxi

Offers 450 feet of dock space in Rock Harbor, accommodating boats up to 65 feet. Electrical, fresh water hook-up, sewage pump-out, gasoline, and diesel fuel, motorboat, canoe, and kayak rental available. Water taxi service drops off or picks up visitors, canoes, or kayaks at many island docks. Services open 5/27 through 9/9.

Fishing Charters and Sightseeing

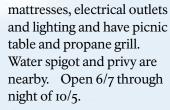
Charters are fully equipped. For details on sightseeing trips refer to page 4. Open 6/7 through 9/9.

Windigo Store and Marina

Offers groceries, cold sandwiches, camping supplies, stove fuel, daily fishing licenses and tackle, gifts and photo supplies. The marina offers gasoline, pump-out service, and motorboat, canoe and kayak rental. Shower and laundry facilities available. Open 6/7 through 9/11.

Windigo Camper Cabins

Two rustic cabins; each accommodates up to six and is furnished with table, chairs, full size futon, 2 bunk beds with



The cost for utilities on Isle Royale is much higher than on the mainland. A utility surcharge will be added to the cost of some goods and services.



Making Island Memories

What is your first park memory? Hot cars, no air conditioning, whining children playing bug-your-brotherharass-your-sister games, wondering why your parents dragged you to some "park" that you think will be booooringgggg? Or the excitement of hearing a plane splash down on the canal in your home town—ready to whisk you and your family to a remote island? An island that smelled wonderful. An island where you had trails to wander and space to explore. An island that seemed immense...at least when you were six.

I think it's pretty special that the first national park I remember visiting is Isle Royale. When the Island is seen through a child's eyes it abounds in adventure and magic. For me, Isle Royale was walks in the deep green woods, skipping stones across the waves, and cold swims in Lake Superior. (Mom's rule was we had to come out when our toenails turned blue and our teeth were chattering.) I don't remember how long we stayed, but I know we took the boat back.

The sounds and smells of the Island must have made a lasting impression, as I returned in each succeeding decade: first with camp counselor friends, then college friends, and even my new husband. I never expected to come back as park superintendent—but when

my husband and I returned to this special place, I went on a journey to re-hike every trail on the Island and explore its bays and remote backcountry.

Later in my childhood, my parents piled the five of us kids in a large station wagon for the hot-car, no-airconditioning road trips during which we drove our parents crazy with "Are we there yet?" But always at the end of the drive was an awesome outdoor playground—a national park. We explored these parks and experienced their magic. I remember my youngest sister spending a half hour following a tiny iridescentgreen beetle; and the whole family

standing silent, in awe of a massive

I believe that an important opportunity while finding your park during this centennial year is to bring along the next generation.

Bring friends and borrow a kid if you don't have any of your own... and create memories that can last a lifetime.



Phyllis Green Superintendent



Share your Isle Royale National Park Centennial trip on Instagram! Tag photos and videos from your adventure with #isleroyalenps for a chance to be featured on the park Facebook page and in a Centennial podcast at the end of 2016.

A Spectacle of Species

Isle Royale National Park is probably best known for its charismatic large mammals. But a walk in the park reveals myriad organisms with their own special stories. With each step down the trail you stumble upon wonder—a hoofmark in the mud, a blue butterfly basking in the sun, a moss sporting tiny parasols—so many species, so little time. How many of these park residents do you recognize?

1) Arctic-alpine disjuncts are isolated populations of species that normally inhabit more northerly climes. On Isle Royale more than twenty plant species were stranded as the last glaciers retreated. The cool coastal temperatures associated with the world's largest freshwater lake have allowed these species to survive far south of



their typical range. Many of these species are rare in Michigan, including this threatened species whose scientific name Empetrum translates to "upon the rocks," which is where you'll find this evergreen growing. HINT: Named for the color of its dark berries plus a

similarly colored bird that may feast upon them.

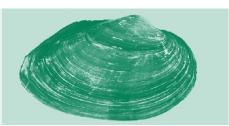
2) No honeybees live on Isle Royale, but there are many native bee species. Recent studies indicate that several of these likely live only on Isle Royale and have never been documented before! This bee species is boreal in distribution and has not been recorded elsewhere in Michigan. It can be found in association with purplish harebell plants

that grow along the park's shorelines.

HINT: This bee species is one in a large family of small bees that might visit after you have been on a long hike, as they are attracted to salt from perspiration.



3) Freshwater mussels are one of the most endangered groups of animals in North America. Four species have been documented on Isle Royale. Although the species present in the park are still commonly found elsewhere, the numbers living here astounded researchers. Population levels so high haven't been seen elsewhere in more than a century. Chickenbone Lake is home to six million



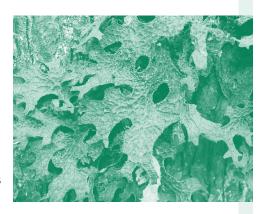
of these shelled creatures! This species is among largest of all the freshwater mussels.

HINT: Named for its huge size (up to ten inches), plus what a lifejacket helps you become.

4) More than 600 species of lichens live on Isle Royale, making it the diversity hot spot for the Midwest and the record holder for most lichen species in a national park. Many lichens are indicators of air quality. Those that hang from trees are especially sensitive to

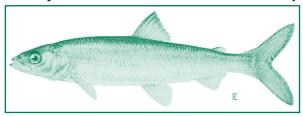
the presence of atmospheric pollution. This lichen that grows on trees, logs and mossy rocks is sensitive to sulfur dioxide levels above ten parts per billion! Olive-brown when dry, it turns a brilliant green after a rain.

HINT: Named for an internal organ that it (slighty) resembles; its scientific name is pulmonaria.



5) Inland lakes on Isle Royale are unusual (even for national parks), as it is unlikely that any non-native fish species have been introduced. But ecological stressors still impact these communities. This cold water fish cannot withstand water temperatures over 67 degrees. In the 1990s, researchers found this fish in four inland lakes, but recent surveys failed to locate any in either Lake Ritchie or Sargent Lake. This could be the first example of localized extinction on Isle Royale as a direct result of

climate change.



HINT: This fish shares its name with a fictional "kid" featured in comics and movies.

Cisco (Coregonus artedi) 4) Lungwort (Lobaria pulmonaria) 3) Giant Floater (Pygandon grandis) 2) Sweat Bee (Dujourea maura) 1) Black Crowderry (Empetrum nigrum)

Interpretive Activities

Enjoyable and educational programs are offered on Isle Royale at Rock Harbor and Windigo, and they are also presented on the National Park Service vessel, *Ranger III*. In addition, the tour boat *The Sandy* offers guided excursions.

Ranger guided tours are free, although those involving *The Sandy* and the *Ranger III* waterway cruises include a transportation fee. Check at local bulletin boards for further details.

For outdoor activities, dress for the possibility of cold or rain and wear sturdy footwear. Trails are rocky and can be slippery during or after wet weather; wear shoes with good ankle support, weatherproofing, and soles that grip well. Come join us!

- All times are Eastern Daylight Time
- \$ = transportation cost
- ** = indicates tours with a park ranger

ROCK HARBOR AREA	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Rock Harbor Visitor Center nformation, books, maps, educational sales materials,				a.m. to 6:00 p.m. – chedule in May, June			
amping permits, dive permits, user fee payments, and r. Ranger Program.			nedded 30	caare in iviay, Julie	and September		
nterpretive Programs			Chl. +h -	h			
oin a park representative for an exploration of Isle Royale's natural and cultural history.			Check the	bulletin board for pr	ogram scriedule.		
THE SANDY TOURS FROM ROCK HARBOR	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
The trails on tours are rocky and uneven with some steep climbs and descents; trails may be slippery. Be prepared for cold temperatures and the possibility of rain.	Th	ne <i>Sandy</i> Tours will o ock Harbor Lodge an	ns involving the <i>The</i> . perate from June 7 t d Rock Harbor Visito for hikers/paddlers a	through September r Center; children ur	9. Rates for the varionder 12 are charged	ous tours are availabl half-price for the <i>Th</i>	e at the e Sandy.
Hidden Lake/Lookout Louise (\$)** Greenstone Shuttle A 4-mile boat trip on the <i>The Sandy</i> to Hidden Lake Trailhead followed by a 2-mile round trip hike past Hidden Lake up 320 feet to Lookout Louise. View the south shore of Canada and the north shore of Isle Royale. Return with the group or bring a lunch and water and hike 9.4 miles back to Rock Harbor.			9:00 a.m. to 12:30 p.m. (Water Bus)		9:00 a.m. to 12:30 p.m. (Water Bus)		
Passage Island (\$) An 8-mile boat tour on the <i>The Sandy</i> crosses one of Isle Royale's popular hipping lanes. The 2-mile round-trip hike leads to Passage Island ighthouse and explores an area of low moose presence.		1:30 p.m. to 6:00 p.m.		9:00 a.m. to 1:30 p.m.		1:30 p.m. to 6:00 p.m.	
Edisen Fishery and Rock Harbor Light (\$) //sit the historic commercial fishery with the resident fishery demonstrator and take a quarter-mile walk to the oldest lighthouse 1855) on Isle Royale and enjoy its maritime exhibits.			2:00 p.m. to 6:00 p.m.		2:00 p.m. to 6:00 p.m.		9:00 a.m. to 1:30 p.m. (Water Bus)
Raspberry Island/Sunset Cruise (\$) Take a walk along a boardwalk through the spruce bog on Raspberry Island followed by a cruise on the <i>The Sandy</i> around Recoville and Blake Points to view features like the Canada Recovine, the site of the <i>Monarch</i> shipwreck, and a Lake Reperior sunset (after Aug. 15, cruise only).			8:00 p.m. to Sunset in June-July 7:30 p.m. to Sunset in August- September	2:30 p.m. to 5:30 p.m (tour goes to Raspberry Island only)		8:00 p.m. to Sunset in June-July 7:30 p.m. to Sunset in August- September	
DAISY FARM	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
evening Programs Explore Isle Royale's natural and cultural istory with a guest speaker.			Check the campgro			à.	
WINDIGO	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Vindigo Visitor Center nformation, books, maps, educational sales materials, camping termits, dive permits, user fee payments, and Jr. Ranger Program.			-	a.m. to 6:00 p.m. – schedule May, June,	-		
nterpretive Programs oin a park representative for an exploration of Isle Royale's natural and cultural history.			Check the	bulletin board for pr	rogram schedule.		
HOUGHTON	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Houghton nformation, trip planning, books, maps, and other educational sales materials, group camping reservations, boater camping permits, dive permits, and user fe	-) through 9/17 open 2017 open 8:15 a.m	·		-	idays
RANGER III	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
nterpretive and Educational Programs While onboard, park staff and guest speakers, weather permitting, will explore Isle Royale's natural and cultural history or topics related to the Lake uperior Basin. Park staff will assist in trip planning, answering questions, and issuing backcountry camping permits.			9:00 a.m. to 2:00 p.m. 5/31 through 9/6	9:00 a.m. to 2:00 p.m. 6/1 through 9/7		9:00 a.m. to 2:00 p.m. 6/3 through 9/9	9:00 a.m. to 2:00 p.m. 6/4 through 9/10
(eweenaw Cruises (\$) njoy an afternoon cruise along the scenic Keweenaw Waterway aboard the <i>Re</i> or reservations call (906) 482-0984	anger III.				1:00 p.m. to 3:30 p.m. 7/14, 7/21, 7/28, 8/11 and 8/25		
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Planning Your Visit

Park User Fees

There is a daily user fee of \$4 per person per calendar day. This applies to all park visitors, including those visiting for the day. National Parks and Federal Recreational Lands Annual Pass, Senior Pass, and Access Pass do not cover this fee. Children 11 years and younger are exempt.

For 2016 Pay use fees in advance at www.pay.gov. Type Isle Royale in the search block to find the Isle Royale NP Individual Daily Pass form. Bring your receipt as proof of payment to show upon arrival in park.

Isle Royale Queen, Voyageur II, Sea Hunter and Isle Royale Seaplanes no longer collect park user fees. Visitors using these services should pay in advance to avoid congestion and long waits upon arrival.

4th Grade Pass Through August 31, 2016: user fees will be waived for US students in 4th grade and up to three accompanying adults; student must present personalized paper voucher or 4th grade pass on arrival. Go to www. everykidinapark.gov to learn more and receive a voucher.

Camping

Permits are required for all overnight stays at campgrounds, cross-country sites, docks, or at anchor, regardless of group size or method of travel.

For trip planning assistance call (906)482-0984; write to Isle Royale National Park, 800 East Lakeshore Drive, Houghton, MI, 49931: or email ISRO_ParkInfo@nps.gov

Group Camping — groups of seven or more (see chart below)

Advance reservations are required for any group or organization bringing seven or more people to the island. If your group exceeds ten people you must split into two parties, each independent and traveling on completely separate itineraries. Organizations may not have more than twenty people camping on the island at any one time and are limited to eighty people a year.

Group leaders should carry medical information for each group member including known allergies and medical conditions, and medications currently

Small Party Camping — parties of six or less (see chart below)

Camping for individual parties is on a firstcome, first-served basis.

All small party campsites contain either tent sites or a three-sided shelter. Shelters and tent sites are available on a first-come, first-served basis. Shelters may not be reserved and may not be used solely for cooking or the storage of gear. Tents may not be erected outside at shelter sites. Close shelter doors gently to minimize intrusive noise.

Expect crowded conditions at campsites from late July through August. When sites are full campers should double up and share empty tent pad space.

Campers must stay in established campsites unless off-trail (cross country) arrangements are made when permitting. Off-trail hiking and camping are difficult on Isle Royale.

Commercial Groups and **Special Use Permits**

For-profit groups providing goods, activities, or service to the general public within the park must obtain a Commercial Use Authorization - CUA (\$200 fee.) These groups include camps, outfitters, tour groups, or any other operation that provides compensation, monetary gain, benefit, or profit to an individual, organization, or corporation for the authorized use. Applications for CUAs are accepted between January 2 and May 15.

Commercial filming and still photography, and special events (e.g. weddings) require a Special Use Permit. Fee depends on type of activity and number of people.

For application forms and further information visit www.nps.gov/isro/planyourvisit/fees.htm

"Quiet, Please"

Most visitors come to Isle Royale to hear the sounds of nature in a wild setting. Excessive human noise disturbs wildlife and other visitors. During quiet hours, between 10:00 p.m. and 6:00 a.m. EDT, if people in adjacent campsites can hear your activities, you are being too loud.

Respect Wildlife

Observe, photograph, and enjoy park wildlife from a safe distance. Use binoculars or a zoom lens "to get closer" to wildlife. Loons are especially susceptible to disturbance, and may abandon their nests when approached too closely by boats. Cow moose with calves, particularly in the spring, and bull moose during the fall rut can be dangerous; give them a wide berth.

Keep wild animals wild by discouraging them from approaching humans. Practice proper food storage and keep a clean camp. To protect your food make sure it is sealed and secured. It is illegal to feed, touch, tease, or intentionally disturb wildlife, their homes, nests, or activities. Animals, particularly fox and otter, when habituated to human food, may eventually overcome their natural wariness of humans and may have to be destroyed.

Human Waste

Proper disposal of human waste helps prevent pollution of water sources, minimizes aesthetic impacts to other visitors and reduces the spread of illness. Never defecate within 100 feet (at least 50 steps) of lakes, streams, trails, gullies, or campsites. In areas without outhouses, select a site that visitors are unlikely to discover. With a small trowel, dig a "cathole" 6 to 8 inches deep and 4 to 6 inches in diameter. Use toilet paper sparingly. After use, cover the "cathole" with the excavated soil and disguise it with natural materials. Urinate on durable surfaces away from campsites and water sources. Pack out all used femininehygiene products, carrying them in plastic bags, doubled to confine odor.

Waste Water Disposal

Cleaning Cookware

Most cookware can be cleaned with hot water, a little elbow grease, and sand or other natural scrubbers. Clean cookware at least 100 feet from lakes, streams, trails, gullies, or campsites. Soap is unnecessary for most dishwashing jobs. Even biodegradable soaps take a long time to degrade. Use these products sparingly and keep them at least 100 feet from water sources and campsites. Use a small strainer or screen to remove food bits from the water and pack them out with your garbage. The remaining gray water

should be scattered or broadcast over a wide

area away from camps and water sources.

Bathing/Cleaning Clothes

When bathing use soap only if necessary and use it sparingly. Get wet, then move at least 100 feet away from all water sources and campsites to lather and rinse. Rinse water can be carried in collapsible containers or pots. Clothes can be cleaned by taking them away from water sources and campsites and thoroughly rinsing them with plain water.

Drinking Water

Potable water is only available in Rock Harbor and Windigo. All surface lake and stream water should be considered contaminated with pathogens. Drinking contaminated water can make you very sick. Water collected in the park should be boiled at a rolling boil for at least one minute or passed through a 0.4 micron filter. To be assured of no risk of contamination from small bacteria and viruses, all filtered water should be further treated with iodine or other approved chemical methods. By itself, chemical treatment is not an effective method of water purification. If you boil your water, bring plenty of stove fuel. If filtering, bring a replacement cartridge for filters that cannot be cleaned in the field. Please note: SteriPENs and other UV purifiers have not been manufacturer-tested for a common Isle Royale parasite and cannot be considered effective.

Precautions should be taken to prevent filters from becoming clogged. Filter water from a pot rather than directly from a lake or creek. Allow the sediment in the pot to settle and filter only from the cleaner water on top.

Dehydration is a factor in most medical problems experienced in the park. In hot weather the Greenstone, Minong, and other trails become hot and dry, and creeks that once offered water may be dry. To avoid dehydration, be sure to carry a minimum of 2 quarts of water per person. Drink as much water as possible while near water sources. Start hiking early before the day heats up. Hike at a slower pace than usual and rest in shady spots. Dehydration is also a problem in cold weather as most people don't feel thirsty and tend to drink less. Watch for mild signs of dehydration such as thirst, fatigue, headache and dizziness. Signs of severe dehydration include nausea, reduced or no sweating and long stretches without urinating.

Drinking Water Notice

In recent years, blue-green algae blooms have occurred in several inland lakes. Blue-green algae can be toxic and filtering does not remove toxins from the water. Avoid swimming, fishing or filtering water if it has a cloudy-blue cast or looks like "pea soup." Report possible algae blooms to park staff. If algae blooms occur, advisories will be posted at park visitor centers. For more information visit www.nps.gov/isro/planyourvisit/ safety.htm

Leave What You Find

Enjoy your discoveries and take them home via photographs, drawings, and memories. Natural objects of beauty or interest such as moose antlers, plants, driftwood, cultural or archeological resources, rocks and minerals, including those found in Lake Superior, must be left where they are so others can experience the same sense of discovery. Removing, possessing, or disturbing park resources is prohibited. This may seem like a harmless act, but the cumulative effect of many people doing the same can be quite damaging to park resources. Picking small quantities of berries for personal consumption is permitted.

YOU WILL CAMP AT	PERMIT REQUIRED	OBTAIN YOUR PERMIT AT	NON-REFUNDABLE PROCESSING FEE
Individual camp sites. First come, first serve	Small Party Backcountry Camping Permit	Rock Harbor or Windigo Visitor Centers upon arrival to island, or onboard Ranger III ferry.	\$0
Individual camp sites. First come, first serve	Small Party Backcountry Camping Permit for each party of campers. With completely separate itineraries**	Group Camping office in Houghton in advance by phone at 906-482-0984	\$25 for first 10 people Additional \$25 for 11 to 20 people.
Reserved Group tent sites	Group Camping Permit	or online http://www.nps. gov/isro/planyourvisit/group- camping-parties-of-seven-to- ten.htm	\$25
Reserved Group tent sites	Two Group Camping Permits With completely separate itineraries**		\$50
Reserved Group tent sites and Individual camp sites. First come, first serve	Group Camping Permit and Small Party Backcountry Camping Permit With completely separate itineraries**		\$50
	Individual camp sites. First come, first serve Individual camp sites. First come, first serve Reserved Group tent sites Reserved Group tent sites and Individual camp sites. First come,	Individual camp sites. First come, first serve Individual camp sites. First come, first come, first serve Individual camp sites. First come, first serve Reserved Group tent sites With completely separate Small Party Backcountry Camping Permit and Small Party Backcountry Small Party Backcountry With completely separate	Individual camp sites. First come, first serve Reserved Group tent sites Reserved Group tent site



CAMPGROUNDS • CR-Fires in community ring only	consecutive chick Consecutive the chick The first Labor	(d) .			Special mation	Pornalitions Dock Depthed	On board On concrato Permi
S - Self-contained stoves only	conserve Effect	od Individual Individual		Ground Sites	d dion	Portual trons Pock	On board Generation
W - Treated water supply F - Campfires allowed or standing grills provided	Caring this Lan	adioussites	Shelters	Crounsite	Checitornic	Depthest Dinfeet	On cenernit
r - Campjires allowed or standing gritis provided	1911	11. Tent	She	Cless	2 Hills	in	Rev
Beaver Island	3	0	3	0	S	2'-5'	yes
Belle Isle	5	I	6	0	F	13'	yes
Birch Island	3	I	I	0	S	5'	no
Caribou Island	3	I	2	0	CR	10'	yes
Chickenbone E.	2	3	О	I	S	_	-
Chickenbone W.	2	6	О	3	S	_	-
Chippewa Harbor	3	2	4	I	F	7'	no
Daisy Farm	3	6	16	3	S	9'	no
Desor N.	2	3	О	0	S	-	_
Desor S.	2	7	0	3	S	_	_
Duncan Bay	3	I	2	0	F	6'	no
Duncan Narrows	3	I	2	0	F	6'	no
Feldtmann Lake	2	5	0	2	S	_	
Grace Island	3	0	2	0	S	2'-4'	yes
Hatchet Lake	2	5	0	3	S	_	
Hay Bay	3	I	О	0	S	3'-7'	yes
Huginnin Cove	3	5	O	0	S	_	
Intermediate Lake	2	3	О	0	S	_	_
Island Mine	3	4	0	2	F	_	_
Lake Richie	2	4	0	2	S	_	
Lake Richie/Canoe	2	3	0	0	S	_	
Lake Whittlesey	2	3	0	0	S	_	
Lane Cove	3	5	0	0	S	_	
Little Todd	2	4	0	0	F	_	_
Malone Bay	3	0	5	2	F	3'-6'	yes
McCargoe Cove	3	3	6	3	CR	7'	no
Merritt Lane	3	I	I	0	S	8'	no
Moskey Basin	3	2	6	2	S	8'	no
Pickerel Cove	2	I	0	0	S	_	_
Rock Harbor	I	II	9	3	W-S	_	_
Rock Harbor Marina	Unlimited	_	_	_	F	3'-12'	yes
Siskiwit Bay	3	4	2	3	CR	2'-6'	no
Three Mile	I	4	8	3	S	9'	no
Tobin Harbor Dock	5	_	-	_	S	3'-8'	yes
Todd Harbor	3	5	I	3	CR	2'	no
Tookers Island	3	0	2	0	S	7'	no

0

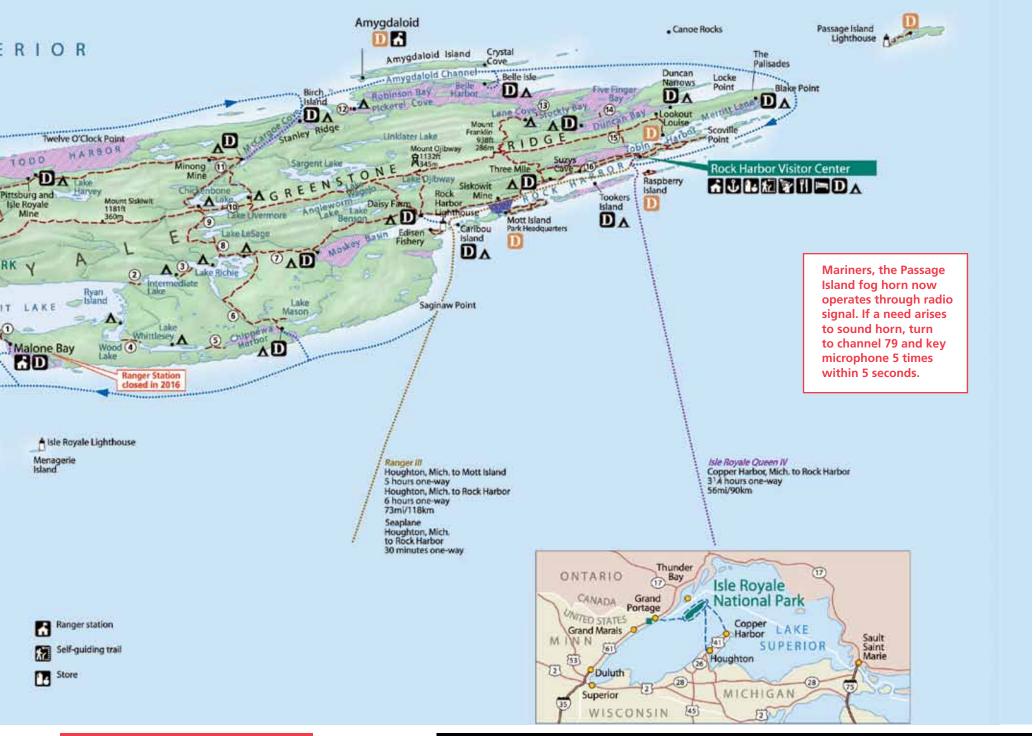
CANOE PORTAGES

 $Distance \hbox{-} El evation\hbox{-} Change \hbox{-} General Comment$

- ① Malone Bay Siskiwit Lake 3 miles, 40' Gradual Slope
- 2 Siskiwit Lake Intermediate Lake .4 miles, 40' Gradual
- 3 Intermediate Lake Lake Richie .6 miles, 120' Hilly and wooded
- (4) Wood Lake Lake Whittlesey .6 miles, 80' Rolling
- (5) Lake Whittlesey Chippewa Harbor .6 miles, 140' Steep grades and rocky
- 6 Chippewa Harbor Lake Richie -1.2 miles, 160' Hilly
- Moskey Basin Lake Richie -2.0 miles, 120' Gradual but very long
- **8** Lake Richie Lake LeSage .6 miles, 100' Steep grades, wet
- Lake LeSage Lake Livermore –
 .4 miles, 80' Steep grades, wet
- Lake Livermore Chickenbone Lake –
 2 miles, 40' Steep but short
- Chickenbone Lake -McCargoe Cove 1.2 miles, 80' Hilly
- ② Pickerel Cove .. miles, 10' Short and sweet
- (3) Lane Cove Stockly Bay .1 mile, 8' Short and sweet
- (4) Five Finger Bay Duncan Bay -
- .2 miles, 8' Short and sweet

 5 Duncan Bay -Tobin Harbor -
- .8 miles, 175' Extremely steep

 16 Tobin Harbor Rock Harbor -
- .2 miles, 40' Up and over NOTE: Because of Isle Royale's geology, north-facing slopes are much steeper than south-facing slopes.



SAFETY TIPS

The island's Wilderness and Lake Superior present challenges and potential hazards to the inexperienced or ill-prepared.

- Basic emergency services are available on the island, but contacting rangers for assistance can be difficult. Emergency response and evacuation may take time, requiring you to rely on your own skills and equipment. Most private boaters on Lake Superior have radios and can contact park rangers in an emergency.
- Bring a good first aid kit, a sufficient supply of any needed medications, and clothing appropriate for the time of year.
- Filter with chemical treatment or boil all surface water. Drink plenty of water. When dehydrated, you tire more quickly, don't think clearly, and are more prone to fall.
- Weather and lake conditions can deteriorate quickly and unexpectedly. Hypothermia can occur any time of the year, especially near Lake Superior, where water and air temperatures are cool to cold year-round. Fog and waves can quickly create dangerous conditions for boaters, especially for paddlers.
- Many people underestimate hiking travel times and overestimate their abilities. Plan shorter, realistic travel days; don't turn your wilderness trek into a forced march.

FISHING REGU	ILATIO	NS
I ISTIII G KEGG		

Species Species	Seasons	Minimum Size	Daily Possession Limit	Comment
Lake Trout, Rainbow Trout and Salmon Lake Superior	All Year	10" except 15" for lake trout	5 in any combination, but no more than 3 of any one species - only one over 34"	*1, *2
Lake Trout Siskiwit Lake	April 16 to October 31			*2, Artificial lures *3, and barbless hooks *4
Coaster Brook Trout Lake Superior	Last Saturday in April to Labor Day	N/A	Catch and release only in park's waters.	*I
Brook Trout Streams and Hidden Lake	Last Saturday in April to Labor Day	N/A	Catch and release only — No possession allowed	Artificial lures *3 and barbless hooks *4
Rainbow Trout Streams		7"	5 fish with no more than 3 fish over 15"	
Lake Herring (Cisco) and Lake Whitefish Inland Lakes	April 16 to October 31	N/A	Catch and release only	*3 *4
Yellow Perch Lake Superior and Inland Lakes	April 16 to October 31	No minimum size	50	Recommend daily limit of 10 *4
Northern Pike Lake Superior and Inland Lakes	May 15 to October 31	24" Lake Superior Inland Lakes - No minimum size, 30" maximum	5 in any combination, but no more than 2 Northern Pike	Artificial lures only on interior lakes *3 and streams *4 See Greenstone article
Walleye Lake Superior and Inland Lakes		15"	normen rike	page 10 for details

 $For additional \ fish \ species, seasons, creel \ limits \ and \ 2016 \ regulation \ updates \ and \ changes \ review \ the \ Michigan \ Fishing \ Guide.$

- * I Park boundaries extend 4.5 miles out into Lake Superior from the outermost land areas of the park.
- *2 For additional trout/salmon fishing information, review the Michigan Fishing Guide.
- *3 Artificial lure means any lure or fly manufactured in imitation of, or as a substitute for natural bait. It is unlawful to use or possess live bait, dead or preserved bait, organic or processed food, or scented material on interior lakes or streams.
- Only barbless hooks may be used for fishing the park's rivers, creeks, and streams, and all inland lakes. Barbed hooks are only allowed in Lake Superior waters.

Pack It In, Pack It Out

It starts at home. Through careful meal planning and repackaging of food items, you can reduce food leftovers and trash in the backcountry. Pack out everything you take in. Leftover food, food scraps, orange peels, nutshells, apple cores, twistties, candy wrappers, fishing line, and cigarette butts must be packed out. If you have food leftovers, either save and eat them later or pack them out. Trash and food scraps must not be burned, buried or placed in outhouses.

Insects

Expect mosquitoes, black flies, gnats, and other insects to peak in June or July. During wet summers, mosquito populations can continue well into August. Bring insect repellent, netting, or other skin barriers. Dry summers will produce an abundance of yellow jackets. Bring an epinephrine kit if you or a member of your party is allergic to bee stings. For others, over-the-counter antihistamines may help counter minor swelling and itching.

Minimize Use of Fires

Campfires are permitted at only a handful of campgrounds. A backpacking stove is a must; these stoves are lightweight, dependable, easier to use, and less damaging to the park than wood fires. Where campfires are allowed, a metal fire ring is provided; never build your own ring. Gather only dead and down wood away from the camp area. Do not import firewood; insects and pathogens from an infected wood source could devastate Isle Royale's forests. Use small diameter wood no larger than an adult's wrist, as this will burn completely and will eliminate the need to pack a hatchet or saw. Collect wood from a wide area and away from the immediate vicinity of camp. This keeps the camp area from becoming depleted of wood and potential nutrients. Do not break branches or strip bark from standing trees, live or dead. Resist the temptation to gather driftwood or wood from beaver dams or lodges. Do not burn trash in any form. The fire should be kept small. Once finished, make sure the flames and coals are dead out and cold to the touch; double check before going to bed or leaving camp.

Canoeing/Kayaking

Lake Superior is well known for its cold temperatures, fog, and sudden squalls that can generate waves that could easily swamp a canoe. This along with scarce outer shore landing sites adds to the potential danger. Small, open vessels are encouraged to use the numerous miles of waterways that the inland lakes provide. Canoeists and kayakers should be familiar with weather patterns and consult the marine forecast at visitor centers before embarking. Be prepared to adjust your schedule to the weather. A portable marine radio is recommended.

Portages -

Canoe routes and portages are on the northeast half of the Island. Portages are marked with a letter "P" on a post. *PFD* –

Every canoeist and kayaker must have a U.S. Coast Guard approved personal flotation device. Wear it; your life may depend on it.

Boat Rental -

Canoe, kayak, and motorboat rentals are available at Windigo and Rock Harbor. For more information contact the Rock Harbor Lodge. (refer to page 2).

Loons

Isle Royale National Park contains over 100 loon nesting territories, supporting the only known population which still breeds in Great Lakes waters. These birds nest on land very close to the shoreline, making them highly susceptible to human disturbance. An adult loon who tremolos (the laughing call) is sending a message that you are too close. From mid-May through July 15 (loon nesting season) visitors are to stay at least 150 feet away from small islands. Additional areas may be closed due to loon nesting, please check at the visitor centers for updated information.

Aquatic Invasive Species

Invasive species are considered to be one of the top threats to the ecological integrity of our national parks. Please take time before and during your trip to do your part to repel the invasion.

What can you do to stop the spread? Before traveling to Isle Royale

Boaters

Drain live wells and bilge on land - remove transom water, lake water, and unwanted bait from your boat. Wash your boat, including bilge and equipment with either: a) hot (greater than 104 degrees F) water, b) high pressure water, c) disinfectant OR Clean and dry your boat and equipment in the sun for five days. Rainy days don't count.

Backpackers

Prior to departure, clean your tent, backpack, camping gear, clothing, and boots.

Canoeists and Kayakers

Remove weeds, algae, and other plant and animal materials from your boat. Wash your boat and equipment with either: a) hot water (greater than 104 degrees F), b) high pressure water, c) disinfectant OR clean and dry your boat and equipment in the sun for five days. Rainy days don't count.

Anglers

Clean fishing gear before island departure.

Divers

Wash all dive gear in warm chlorinated tap water - Disinfect your wetsuit with a special-purpose shampoo - dry all dive gear and wetsuit for seven days before island departure.

While on Isle Royale

If you filter water from Lake Superior, change your filter or backflush several times with filtered water before using inland.

Canoeists and Kayakers

Wipe down your boat and associated gear before moving from Lake Superior to inland waters.

Anglers

When moving from Lake Superior to inland waters, clean gear and change line spools.

Wheeled Vehicles/ Devices

Wheeled vehicles (except for non-motorized wheelchairs) or other mechanical forms of transportation are not allowed outside developed areas at Rock Harbor and Windigo. This includes bicycles and portaging devices.

Weapons, Traps, & Nets

The use or possession of weapons, traps, and nets is prohibited. Weapons include any implements designed to discharge a projectile or missile in the air or water and include among other things the slingshot, blowgun, and bow and arrow. Fireworks are prohibited.

Exception: Possession of firearms within the park is regulated by Michigan law regarding open and concealed carry. Federal law prohibits possessing firearms in certain federal facilities. For information on weapons restrictions aboard ferries and seaplanes, see park website. Please Note: The discharge of firearms within park boundaries is prohibited.

For more detailed information about firearms and links to pertinent legislation and laws visit http://www.nps.gov/isro/learn/management/lawsandpolicies.htm

Pets

Dogs, cats, and other mammals are not allowed. This includes pets on boats within the park boundaries, which extend 4.5 miles into Lake Superior from the outermost land areas of the park. Visitors bringing pets to Isle Royale will be required to leave immediately. Pets disturb wildlife and can transmit diseases, particularly to wolves. Special conditions apply to service animals. Please contact the park for further information.

Showers

The concession operation offers tokenoperated shower facilities at Rock Harbor 5/27 through 9/9 and Windigo 6/7 through 9/II.

Boating

All boaters staying overnight at anchor, at docks, or in campgrounds must first obtain a camping permit. Lake Superior offers challenging and often dangerous weather in the form of dense fog, high winds, waves, and thunderstorms. Combine this with rocky reefs, limited safe harbors, and Isle Royale's remoteness, and it pays for you, your crew, and your boat to be shipshape. For additional information on boating and trip planning please request the park's Isle Royale Boating Guide. In addition to Houghton, Rock Harbor, and Windigo, boaters may obtain Isle Royale camping permits on-line at www.nps.gov/isro.

Restricted Water Activities -

Water skiing and personal watercraft including vessels commonly referred to as jet skis, waverunners, sea-doos, wet bikes, or surf jets are prohibited. Since all of the park's inland lakes are located within designated Wilderness, they can only be explored by paddling. Vessels with motors (even if not in use) are prohibited on inland lakes and streams.

Portable Generators, Electronic and Motorized Devices –

Operation of electronic and motorized devices such as stereos, televisions, radios tuned to commercial stations and portable generators are not permitted except in developed and open-water motorized zones. Developed areas include the Windigo and Rock Harbor developed areas, and the Mott Island Headquarters area. Open water motorized zones include Lake Superior waters outside of designated "quiet/no wake waters".

On-Board Generators -

The operation or use of permanently installed (by the boat manufacturer) on-board vessel generators is allowed between 6:00 a.m. and 10:00 p.m. Eastern Daylight Time in developed zones and at the following docks: Beaver Island, Belle Isle, Caribou Island, Grace Island, Hay Bay, Malone Bay, Rock Harbor, Tobin Harbor and Windigo. On-board generators may not be operated or used at the following public docks: Birch Island, Chippewa Harbor, Daisy Farm, Duncan Bay, Duncan Narrows, McCargoe Cove, Merritt Lane, Moskey Basin, Siskiwit Bay, Three Mile, Todd Harbor, and Tookers Island. Vessels at anchor within Quiet/No Wake Zones may operate on-board generators between 6:00 a.m. and 10:00 p.m. Eastern Daylight Time, except when anchored within 1/4-mile of a designated park campground.

Quiet/No Wake Zones -

These zones promote a quality visitor experience by providing relatively tranquil, natural marine surroundings. Within the zone, vessels must not exceed 5 mph or create a wake in excess of surrounding seas. Quiet/No Wake Zones include specified areas near Todd Harbor, Johns Island, Barnum/Washington Islands, Hay Bay, Wright Island, Malone Bay, Chippewa Harbor, Conglomerate Bay, Moskey Basin, Lorelei Lane, Tobin Harbor, Merritt Lane, Passage Island, Duncan Bay, Five Finger Bay, Lane Cove, Robinson Bay, Pickerel Cove, Belle Harbor, Crystal Cove, and McCargoe Cove. Consult map on page 6 and 7.

Pollution Prevention -

Head pump-out service is available at Windigo and Rock Harbor when the concession operation is open.

Vessels carrying spare fuel in portable containers must use legally approved containers. Fuel may not be stored on docks.

Customs-

All vessels arriving from Canada (U.S. or Canadian) must clear U.S. customs at Windigo or Rock Harbor Visitor Center. A valid passport, U.S Passport card, enhanced drivers license, or trusted traveler program card is required. Visitors from Canada can be cleared for Isle Royale only. For additional information go to www.cbp.gov.

Divers-

Please refer to your dive permit regulations concerning compressor use.

Fuel –

Gasoline is sold from 6/7 through 9/11 at Windigo; gasoline and diesel fuel are sold from 5/27 through 9/9 at Rock Harbor. Diesel fuel is not available at Windigo. Early and late season service or fuel may be obtained at Windigo and Mott Island if personnel are available.

For detailed information on park regulations visit www.nps.gov/isro/learn/management/lawsandpolicies.htm

For additional information on Leave No Trace request a copy of the park's LNT booklet or visit www.lnt.org

The (Geologic) Ups and Downs of Hiking Isle Royale

Hiking Isle Royale is an incredible, yet challenging experience. I recall my first clamber from Daisy Farm to Mount Ojibway: gain some elevation and then drop into a valley, up and down, repeat. If you're carrying a twenty-fivepound pack, you might start to brood over how frequently the topography changes, or why one side of the ridge seems steeper than the other.

This stunning ridge and valley terrain is a result of diverse geologic forces. The black rocks you might warm your bare feet on offer a window into Earth's ancient volcanic past. "Volcano" usually conjures an image of Mt. Vesuvius or Mt. St. Helens, but Isle Royale's formation was more like eruptions you might see in Hawaii. Only larger. Much larger. Imagine massive magma oceans, the site of Earth's largest lava outpourings, extruded more than one billion years ago. Then picture quiet times between eruptions, when softer sedimentary layers were deposited between lava flows.

So, lava flows. Then what? Subsidence and faulting tilted and dipped this series of lava flows and sedimentary layers southeastward to what is now the middle of Lake Superior.

Now, imagine the forces at play 10,000 years ago when ice nearly two miles thick scraped across these tilted lava flows and sedimentary layers. Isle Royale's resilient volcanic layers resisted glacial erosion; the softer sedimentary layers were more easily removed. When the glaciers retreated, they revealed the ridges and valleys we hike today, along with harbors and islands we paddle in and around, leaving Isle Royale isolated in a vast lake.

Simply put, massive lava flows and interbedded sedimentary layers, tilted southeastward and subjected to glacial erosional forces = ridge-and-valley topography. Hiking north-south means lots of up and down, with steeper climbs if you are headed south! East-west is a little easier going.

The Greenstone flow, the largest lava flow known on the planet, forms the backbone of the island—the prominent Greenstone Ridge. Climbing the ridge is worth every moment, rewarding you with breathtaking vistas in all directions. Notice the trend of the elongated islands to the north. How are the harbors and lakes oriented? How many ridges and valleys can you count? How many did your legs register? Isle Royale's island biodiversity attracts many visitors. But the island also offers a rich

geodiversity, from small to large scale: greenstones and agates, historic copper mining, a visible record of higher lake levels, glacial grooves and striations, to name a few. So while soaking your feet in Lake Superior at the end of an adventure, spare a moment to appreciate the ancient underpinnings and all of the forces that have shaped the island. It wouldn't be here if not for geologic processes over geologic time! Erika Vye

Geologist and Geoheritage Specialist



Along the Trail with Wilderness Stewards

 $Total\ boardwalk\ planks = 49.$ Bridge heaved with annual freezethaw cycle. Drop zone for new boardwalk material located up on ridge to the west; will need to carry planks down.

Trails Leader Corey Process reviews his notes about the Minong Trail's longest boardwalk plank bridge, located between



Windigo and North Lake Desor. The information is vital to completing an upcoming series of helicopter plank drops, a step in revitalizing Isle Royale's trails infrastructure for the 21st century. When Isle Royale was designated as a national park in 1931 such an operation would have been unthinkable, since park managers were busy discussing whether or not trails should even be present. In the interests of visitor safety and minimizing impacts to park resources, narrow trails were constructed and maintained, eventually stretching to the 165 miles Isle Royale hosts today. Hiking towards Windigo, Corey

and the trail crew clear out water bars and cut overgrown vegetation. The work is repetitive, but crucial to visitor safety and the long-term integrity of the trail itself. These days, the trails division is focused not on expanding the trails system, but on maintaining and rerouting small sections of existing trails. Boardwalks are eliminated where possible, making the section easier to maintain over time.

Corey and the crew break at the Minong Ridge Overlook. The clear July afternoon offers a spectacular view of the Canadian shoreline and Lake Superior's vast, blue water. Corey imagines the hustle and bustle of the city of Thunder Bay just across the water and is instantly thankful for the tranquility he enjoys for the half-year he works at Isle Royale. The crew seems to share these feelings: animated chatter has turned into appreciative silence. Respect for the island and a sense of responsibility to protect and preserve the park are as important to the job as the skills of trail maintenance.

Voices can be heard approaching, breaking the crew's tranquil trance. A group of Boy Scouts appears and recognizes at once the dirt-covered green and gray uniforms of the trail crew. The questions begin. How far have you hiked today? How much does

that plank weigh? Why do you like working here? Answering the last question, Corey shares that the appreciation of visitors who understand the hard work put into trails is a main reason, but that the island's isolation, which seems to slow down time itself, is what he loves most. The scouts wave goodbye and hike on. Break over, the crew collects packs and tools and resumes their day's endeavors, working their way down the ridge until they disappear into the island's wilderness.

Katie Keller Park Ranger **Corey Process** Trails Crew Leader



– Planning for the Future —

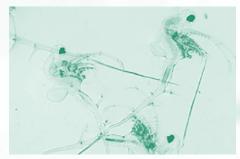
Isle Royale continues to plan for the future. Planning efforts for cultural resources, wilderness, and moose and wolves are currently in progress. Drafts of the plans will be available online for review and comment. Public comments are a critical part of the planning process and we appreciate your continued interest in the future of Isle Royale National Park. Newsletters, updates, participation opportunities, and other information related to these plans can be found at http://parkplanning.nps.gov/ISRO.

Invader Alert – *Aquatic Invasive Species*

Isle Royale waters, like all Lake Superior waters, face a growing threat from the invasion of non-native species. Once species like zebra mussels, spiny water fleas and sea lamprey enter an area, they cause large scale changes in the ecosystem.

Two invasive species, the sea lamprey and the spiny water flea have already established a presence in Isle Royale waters. The spiny water flea is presently found only in Lake Superior. The park is concerned it may enter the inland lakes. Once established, its spines harm predator fish and the fleas disrupt the zooplankton population, the basic food source for many fish species.





In 2009, zebra mussels were documented for the first time. Their potential to cause catastrophic change cannot be overstated. If zebra mussels were to enter the inland lakes it is estimated that they would cover nearly every habitable surface on an inland lake floor in two to four years.

The exotic virus Viral Hemorrhagic Septicemia (VHS) has reached Lake Superior. This disease affects more than 40 species of fish including lake trout and coaster brook trout. The incredible genetic diversity of Isle Royale's lake trout would be at risk if VHS was introduced to Isle Royale waters.

Stopping the Spread – Visitor Responsibilities

Vessel owners are legally responsible for Aquatic Invasive Species decontamination prior to entering park waters (extending 4.5 miles from Isle Royale and the outer islands). This applies to all vessels (power and sailboats, canoes, kayaks, etc.), regardless of size or configuration. Please take the following steps to prevent the transport of zebra mussels and other aquatic invasive species to Isle Royale waters:

Inspect for zebra mussels and other aquatic invasives attached to your trim tabs, swim platform, motor mounts, hull and equipment. Feel the hull. A coarse sandpaper texture may indicate larval mussels attached to your boat.

Remove all zebra mussels and other invasive species along with any aquatic plants from your boat, trailer and equipment. Larval mussels are

best removed with a scrub brush or similar method. Treat invasives like litter. Dispose of them in a trash can.

Drain all water from your motor, livewell, bilge, transom, etc., away from any body of water.

Wash your boat, including bilge and equipment with a) hot water (greater than 104 degrees F), b) high pressure water, or c) disinfectant OR

Clean and Dry your boat and equipment in the sun for five days. Rainy days don't count.

Check to see if your boat is coming from a port known to have zebra mussels. Duluth, Superior, Thunder Bay, Marquette, Ontonagon and Ashland all have documented infestations. If so, take extra measures to assure decontamination.

Fishing at Isle Royale

With its multitude of reefs and bays on Lake Superior and its numerous interior lakes and streams, Isle Royale provides varied opportunities for recreational fishing. A Michigan fishing license is required for fishing in Lake Superior, including narrow bays and harbors, and when transporting fish from the island to the mainland. If you are under 17 years of age, you may fish without a license. Licenses are not required to fish on the inland waters of Isle Royale; possession limits

are generally the same as those set by the State of Michigan. Anglers should refer to the Michigan fishing regulations for possession limits and detailed license requirements for Lake Superior (also see the chart on page 7 for a brief guide to regulations.) Only 24-hour licenses are available on the island and only when concession services are open. You may purchase a Michigan fishing license and download a copy of the Michigan Fishing Guide at www. michigan.gov/dnr.

REMINDER:

Barbless hooks and artificial lures only in all inland lakes, streams and creeks.

Special Brook Trout Regulations

Surveys indicate populations are dangerously low and may be at risk of disappearing unless protective measures remain in place. The National Park Service and Michigan DNR have implemented protective regulations at Isle Royale in order to help with the recovery of this once-common fish.

Brook trout can be identified by their nearly square tail and wormlike pattern on the back and dorsal fin. If you're uncertain about the species you catch, return it to the water.

Lake Superior Waters

(extend 4.5 miles out from the island)

Catch and release only for all brook trout, including all bays and harbors.

Inland Waters

Catch and release only in all lakes, streams, and creeks. Only artificial lures and barbless hooks can be used in all lakes, streams, and creeks.

Fishery Conservation

How can you help to conserve and minimize damage to the Isle Royale fishery?

- Possession or use of bait for fishing within Lake Superior park waters is limited to those fish and/or fish parts caught within Isle Royale National Park waters. Transporting fish or fish parts for use as bait to the park is prohibited.
- Catch only what you plan to keep or eat. Catch and release can be damaging and stressful on fish.
- Know the minimum and maximum legal size of fish so they can be released quickly if they are too small or too large.
- If moving from Lake Superior to inland waters, change to a new spool of line to help prevent the spread of invasive spiny waterfleas to inland lakes.
- Release larger fish and keep medium size fish to insure future productivity.
- Return fish to the water as soon as possible. While unhooking them, keep fish in the water as much as possible.

- Try not to handle fish, but if you need to, do so with a wet hand. Release handled fish gently by allowing them to swim from your hands rather than throwing them back into the water.
- Do not squeeze the fish or place fingers in the gills, since a torn gill can cause the fish to bleed to death.
- Remove the hook gently. Pliers work best. Cut the line near the hook if a fish is deeply hooked. A steel hook will decompose in time.
- Use only artificial lures (required in inland waters) as non-native species can accidentally be introduced by using live bait. In addition, live bait is more likely to be swallowed; resulting in more damage to fish.
- Use barbless hooks or bend down the barbs on the hooks.
 Using larger spoons when fishing for larger fish will help prevent catching undersize fish.

Disposal of Fish Remains

Follow the following guidelines to eliminate the potential for attracting and feeding wildlife and to reduce unsightly fish remains and odors. Clean fish away from docks and campgrounds. Do not throw remains into shallow water, or to gulls or other wildlife. To dispose of remains:

- At Rock Harbor and Windigo, please use the fish cleaning station.
- At other Lake Superior locations, the preferred method is to deposit chopped remains (pieces 4" or less) into water at least 50' in depth.
- At inland lake sites, the preferred method is to deposit chopped remains (pieces 4" or less) into deep water via canoe. The alternate method is to move at least 200' (75 steps) from the campground and throw chopped remains as far as possible into deep water.

Fish Consumption Advisory

Contaminants discovered in the Park ecosystem remind us that although Isle Royale is remote, it is part of a global system. Ongoing research in six inland lakes (Sargent, Siskiwit, Eva, Shesheeb, Wagejo, and Angleworm) shows fish with mercury levels exceeding the State of Michigan fish consumption advisories.

For information on fish consumption advisories check with park staff or visit the Michigan Department of Community Health website at: http://www.michigan.gov/eatsafefish

or the EPA Fish Advisory website at: http://water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories

Transporting Fish to the Mainland

You are allowed only one day's catch in your possession. One day's limit may be transported via ferries or seaplane with a Michigan DNR permit while license holder remains in the park. See park website for details.

Transportation Services

Rates and schedules are subject to change.

FROM HOUGHTON. **MICHIGAN**



RANGER III **National Park Service owned and** operated.

5 hours one-way to Mott Island 6 hours one-way to Rock Harbor, 165 ft., 128 passenger vessel

SCHEDULE (Eastern Daylight Time) 5/31 thru 9/10

■ Houghton to Rock Harbor

- Tues. and Fri. 9:00 a.m.
- Rock Harbor to Houghton Wed. and Sat. at 9:00 a.m.

FARES	ONE WAY
Low Season Prior to 7/5 and after	8/27
Adults	\$53.00
High Season 7/5 through 8/27	
Adults	\$63.00
All Season	
Children (7 thru 11 years)	23.00
Children (age 6 and under)	FREE
Boat (less than 18'01")	90.00
Boat (18'01" to 20'00")	140,00
Disabled boat (20'01" to 24'00")	
	ptain's discretion
Canoes/Kayaks (hand-loaded)	
Canoes/Kayaks (over 20'00" or 90 lb	os.) 50.00
Outboard Motor	
100 lbs. gear per passenger	
Additional freight after 100 lbs	9.50/100wt.
GROUP RATES	NE-WAY

Additional freight after 100 lbs	\$9.50/100WI
GROUP RATES	ONE-WAY
(A party of seven or more)	
Adults	\$53.00
Children (7 thru 11 years)	\$23.00
CDECIAL DATES	

SPECIAL RATES Ranger III / NPS Centennial Birthday Special

Round trip: Adult \$63.00 Children \$23.00, If round-trip is scheduled between 6/7 and 7/2 Keweenaw Waterway Cruise (2 1/2 hours) 7/14, 7/21, 7/28, 8/11 and 8/25

Depart from Houghton 1:00 p.m.
Adults\$20.00
Children and Youth (age 1 through 15) \$5.00
Infants (under 1 year)FREE

RESERVATIONS

Full payment required for confirmed reservation. National Park User Fee is payable at time of departure. Major credit cards accepted. Reservations accepted on or after January 2.

CANCELLATIONS

Refunds, minus a 15% processing fee, if cancellation is received 3 days prior to sailing and tickets are returned. No refund within 3 days of sailing.

AMENITIES

Free parking • Largest of the ships • Two decks for passenger use • Ranger III Grill • Interpretive Programs • Backcountry Permits issued and orientation given onboard • Four lounges • Accessible Bathroom

FOR INFORMATION OR **RESERVATIONS CONTACT** Isle Royale National Park

800 Fast Lakeshore Drive Houghton, MI 49931-1869

On-line Reservations: www.nps.gov/isro

Phone:

(906) 482

Fax:

(906) 482-8753 E-mail:

ISRO_ParkInfo@nps.gov

Website:

www.nps.gov/isro

4th Grade Pass

Through August 31, 2016: user fees will be waived for US students in 4th grade and up to three accompanying adults; student must present personalized paper voucher or 4th grade pass on arrival. Go to www. everykidinapark.gov to learn more and receive a voucher.

FROM COPPER HARBOR, **MICHIGAN**



ISLE ROYALE OUEEN IV

31/2 hours one-way, concession operated, 100 ft., 100 passenger vessel

SCHEDULE (Eastern Daylight Time)

■ Copper Har	bor 8:00 a.m.	
■ Rock Harbo	r 2:45 p.m.	
5/9 thru 6/3		M & F
6/6 thru 6/30		M, T, Th, F, Sat
7/1 thru 7/19	M,	T,Th, F, Sat, Sun
7/21 thru 9/5	Every Day (r	no trip W 8/31)
9/9 thru 9/30		M & F

9/9 เกิน 9/30	IVI Q F
FARES	ONE-WAY
5/9 thru 7/19 & 8/21 thru 9/30	
Adults	\$62.00
Children (1 thru 11)	31.00
7/21 thru 8/20	
Adults	\$68.00
Children (1 thru 11 years)	34.00
Infants (under 1 year)	FREE
Canoes/Kayaks	
Double Kayaks	40.00
Motors (under 5 hp)	5.00
Motors (5 hp and over)	15.00

70 lbs. gear per person.... **RESERVATIONS**

Online reservations available at www.isleroyale. com. Phone reservations also taken. Full-fare deposit required. Canoes and kayaks require reservations. Major credit cards accepted.

CANCELLATIONS

There is no refund if canceled less than 3 days before sailing. Cancellations received with more than 3 days notice will be sent an 85% refund. If canceling a group of 10 or more, two weeks notice is required.

MISCELLANEOUS

Parking fee • Limited snacks • Freight, canoes. etc. carried for our passengers only • Baggage limited to 70 pounds per passenger • Email and faxes are for information requests only Motor Boaters be advised that the Queen IV is presently not equipped to carry motor boats. Boaters should contact the Ranger III for passage.

FOR INFORMATION OR **RESERVATIONS CONTACT**

The Isle Royale Line, Inc. P.O. Box 24, Copper Harbor, MI 49918

Phone: (906) 289-4437

(906) 289-1060 E-mail:

Website:

www.isleroyale.com

isleroyaleque

FROM GRAND PORTAGE, **MINNESOTA**



VOYAGEUR II

Grand Portage to Windigo - 2 hours one-way, Windigo to Rock Harbor - 5 hours one-way, concession operated, 60 ft. vessel

SCHEDULE (Central Daylight Time)

■ Grand Portage to Ro	ck Harbor via Windigo/Mo
Cargoe Cove/Belle Isle	
5/7 thru 5/28	
5/30 thru 9/17	M, W & Sat 7:30 a.m
9/21 thru 10/5	W 7:30 a.m
■ Rock Harbor to Gran	d Portage via Daisy Farm/
Chippewa Harbor/Malo	ne Bay/Windigo
5/8 thru 5/29	Th & Sun. 8:00 a.m
	(0.00 a m FDT

5/8 thru 5/29	Th & Sun. 8:00 a.m.
	(9:00 a.m. EDT)
5/31 thru 9/18	Tue, Th & Sun 8:00 a.m.
	(9:00 a.m. EDT)
9/22 thru 10/6	Th 8:00 a.m.
	(9:00 a.m. EDT)
Windigo Round-Trip – Sa	at. & Sun. 9/24 thru 10/2
Grand Portage to Windig	o8:00 a.m.
Windigo to Grand Portag	ge1:00 p.m.
	(2:00 p.m. EDT)

FARES	ONE-WAY
Grand Portage to Windigo	\$71.00
Child (4 thru 11 years)	49.00

Cilila (4 tilla 11 years)	49.0
Grand Portage to any designated same	day stop
beyond Windigo/Any designated same of	day stop
beyond Windigo to Grand Portage	85.0
Child (4 thru 11 years)	60.0

Child (4 thru 11 years)	60.00
Inter-island travel between various	same day
designated island stops	53.00 - 66.00
Inter-island travel for child	.37.00 - 47.00
Canoe, Kayak	40.00
40lbs Gear per passenger	FREI
Air Tanks, Additional freight	\$40.00/100 lb

RESERVATIONS

Full payment required for confirmed reservations. Major credit cards accepted. Refund is 85% of fare, provided cancellation is received at least 2 full weeks prior to departure.

MISCELLANEOUS

Hot coffee available • Freight shipments must be arranged in advance • Fuel surcharge • Fishing poles must be in protective cases • Hard gear must be in securely closed packs.

FOR INFORMATION OR **RESERVATIONS CONTACT**

Grand Portage-Isle Royale Transportation Line, Inc. P.O. Box 10529, White Bear Lake, MN 55110

(651) 653-5872 - Oct thru April (218) 475-0024 - May thru Oct

E-mail: reservations@isleroyaleboats.com

Website: www.islerovaleboats.com

FROM GRAND PORTAGE, **MINNESOTA**



SEA HUNTER III

1.5 hours one-way, concession operated,

SCHEDULE (Central Daylight Time)

Grand Portage to	
Windigo	departure 8:30 a.m
6/8 thru 7/9	W, Fri, Sat
7/13 thru 8/14	W, Th, Fri, Sat, Sur
8/17 thru 9/3	W, Fri, Sat
■ Windigo to	
Grand Portage	daily 2:00 p.m
	(3:00 p.m. EDT)
6/8 thru 7/9	W, Fri, Sat
7/13 thru 8/14	W, Th, Fri, Sat, Sur
8/17 thru 9/3	W, Fri, Sat
FARES	ONE-WAY
Adults	\$71.00
Children (4 thru 11 years)	
Canoe/Kayak	
40 lbs. Gear per passenger.	

SAME DAY ROUND-TRIP

... \$40.00/100 lb.

Children (4 thru 11 years).

RESERVATIONS

Additional freight..

Full payment required for confirmed reservations. Major credit cards accepted. Refund is 85% of fare, provided cancellation is received at least 2 full weeks prior to departure.

MISCELLANEOUS

Hot coffee available • Limited snacks • Sightseeing en route • Fishing poles must be in protective cases • Hard gear must be in securely closed packs Fuel surcharge.

FOR INFORMATION OR **RESERVATIONS CONTACT**

Grand Portage-Isle Royale Transportation Line, Inc. P.O. Box 10529, White Bear Lake, MN 55110

(651) 653-5872 - Oct thru April (218) 475-0024 - May thru Oct

reservations@isleroyaleboats.com

Website:

www.isleroyaleboats.com

FROM HOUGHTON, **MICHIGAN**



SEAPLANE

30 – 40 minutes one-way, concession operated amphibious Cessna 206

SCHEDULE

5/19 thru 5/31	M, T, Th, F, Sat
6/2 thru 9/17	. M, T, Th, Fri, Sat, Sun
9/19 thru 9/23	M, T, Th, Fri

FARES	
Round trip	\$310.00
One Way	210.00
Inter-island	125 00

RESERVATIONS

Full payment required for confirmed reservation. Full refund of fare, provided cancellation received at least two full weeks prior to departure.

MISCELLANEOUS

The seaplane accommodates up to four persons. • Baggage is limited to 50 pounds per person. • The plane cannot carry stove fuel. Selected fuels

are available upon arrival in the park FOR INFORMATION OR **RESERVATIONS CONTACT**

Isle Royale Seaplanes 16179 Via Solera #106 Fort Myers, FL 33908

Phone: (906) 483-4991

(877) 359-4753

E-mail: info@isleroyaleseaplanes.com

Website: www.isleroyaleseaplanes.com

WATER **TRANSPORTATION** ON THE ISLAND

VOYAGEUR II

During its clockwise circumnavigation of the Island, Vovageur II provides drop-off and pickup services at several areas. Please refer to their schedule and rates

ROCK HARBOR LODGE

WATER TAXI Provides drop-off and pick-up services between Rock Harbor and McCargoe Cove on the north shore and Rock Harbor and Malone Bay on the south shore. Open 5/27 through 9/9. For rates and further information visit www.RockHarborLodge.com For contact information refer to page 2.

GENERAL INFORMATION

- No alcohol consumption on passenger ferries.
- Pets and wheeled devices are not allowed.
- Wheelchairs are allowed. Stove fuel can be carried in approved containers on ferries, but not on the seaplane. • Lake Superior weather is cool throughout the year; for comfort bring

2016 User Fee Payments

Pay user fees in advance at www.pay.gov. Type Isle Royale in the search block to find the Isle Royale NP Individual Daily Pass form. Bring your receipt as proof of payment to show upon arrival in park.

Isle Royale Queen, Voyageur II, Sea Hunter III and Isle Royale Seaplanes no longer collect park user fees. Visitors using these services should pay in advance to avoid congestion and long waits upon arrival.

User fees apply to all park visitors, including those visiting for the day. National Parks and Federal Recreational Lands Annual Pass, Senior Pass, and Access Pass do not cover this fee.

Isle Royale National Park season passes can only be purchased through the park; either by phone (906-482-0984), or in person at a visitor center.

Isle Royale's Recreation Fee Program

Fee Categories	Rate and Explanation
Daily User Fee Pay user fees in adv	\$4.00 per person per day. Children II and under are exempt from the fee. (See box at left) pance at www.pay.gov
(Optional): Individual Season Pass	\$50.00 This pass is valid from April 16 through October 31 of the year indicated. The pass covers the User Fee for the person whose signature appears on the pass.
(Optional): Season Boat Rider	\$150.00 This pass is valid from April 16 through October 31 of the year indicated.

Pass

The pass covers the User Fee for all persons onboard, when affixed to the private boat (charters excluded). When camping, the pass is only valid for passengers included in and following the itinerary of the vessel.

Join the Isle Royale & Keweenaw Parks Association and Support Isle Royale National Park Programs

The Isle Royale & Keweenaw Parks Association, in partnership with the National Park Service, promotes the public's understanding and appreciation of Isle Royale National Park and Keweenaw National Historical Park through education and research.

By publishing and selling products about Isle Royale National Park and Keweenaw National Historical Park, we educate people about these special places and raise funds that are reinvested in the parks to support research and interpretive programs.

Every year the Isle Royale & Keweenaw Parks Association contributes approximately \$25,000 in cash and in-kind aid to Isle Royale National Park.

YOU CAN HELP....

You can support the work of the Isle Royale & Keweenaw Parks Association and our partner parks by becoming a contributing member of our organization. Your <u>tax-deductible</u> contribution will help us share the stories of Isle Royale National Park and Keweenaw National Historical Park with people of all ages, around the world.

Membership levels are:

(Payable in 4 installments)

See website for member premiums.

Member benefits:

- · a 10% discount on all purchases from IRKPA outlets and many other national park visitor centers throughout the U.S.,
- three issues of Wolf's Eye newsletter,
- copies of park newspapers, *The Greenstone* and the *Keweenaw* Guide.
- invitations to park programs, trips, and events,
- monthly e-mail park news updates.

Become a member today!

Call us at 800-678-6925, or join online at www.irkpa.org



Offers books and other educational

products in visitor centers at Rock Harbor, Windigo, Houghton and Calumet or online;



Windigo Visitor Center

> Produces park signs and brochures;

> > **Brochures**



Isle Royale **Botany Workshop**





Provides funding for historic preservation projects.

Historic Preservation **Projects**

BOOKS, MAPS & MORE Your purchases help support Isle Royale National Park!

Isle Royale National Park:

Foot Trails and Water Routes

The park's authoritative trip-planning guide. Complete descriptions for trails and waterways, including mileage, difficulty and amenities at each destination. More than 60 photos and 35 detailed maps of the park's backcountry. 4th Edition. 184 pp. Author: Jim **DuFresne**

Trails Illustrated Map

Topographic map with wilderness tips, Leave No Trace guidelines, trails, trailheads, points of interest, campgrounds, and more. Printed on waterproof, tear-resistant material with half of the island on each side. Measures 4" x 9" folded and 38" x 25" open. Scale = 1:50,000. Updated 2006.

Hiking & Canoeing Package Includes book and map above, plus the park checklists of birds and

Exploring Isle Royale DVD

NEW PRICE. This orientation video produced by the National Park Service shows how to best enjoy the island's many attributes, including its trails, lakes, and campsites. Winner of the 1995 Michigan Outdoor Writers Association Best Outdoor Travel Program. 28 minutes.

Island Life: An Isle Royale Nature Guide

A complete guide to the common flora and fauna of Isle Royale in one easy-to-use and easy-to-carry volume. Over 350 species of mammals, birds, fish, reptiles, trees, and flowers, each illustrated with a color photograph or drawing. 168 pp.

Authors: Ted Gostomski & Janet Marr

Superior Wilderness:

Isle Royale National Park

\$16.95 A natural history of Isle Royale for the layperson, emphasizing the ecology of the island, the relationship between its plants, animals and physical environment. Color photographs and an extremely readable text. Maps, photos, charts, illustrations. 171 pp. **Author: Napier Shelton**

The Wolves of Isle Royale:

A Broken Balance

This classic first-hand account of the Isle Royale predator/prey study is illustrated with more than 100 photographs. The book reveals the true nature of the little-understood wolf and some of the secrets of this one-of-a-kind research project, now in its 58th year. 192 pp. Author: Rolf Peterson

100 Fast and Foolproof Freshwater Fish Recipes

\$14.95 Mouth-watering recipes for tilapia, catfish, whitefish, trout, smelt, walleye, perch, and more with a focus on fast and foolproof. 144 pp. Author: Henry Sinkus

Advice From Isle Royale and Lake Superior Take home some good advice from Lake Superior and its island wilderness with these new 5"x10" wall plaques! \$9.95 Also available: Advice from Isle Royale t-shirts, sweatshirts, magnets, laminated bookmarks, and 5.5"x8.5" postcards, and Advice from Lake Superior magnets and bookmarks.

Guidebook to American Values and **Our National Parks**

Celebrate the 2016 National Park Service Centennial with Director Jon Jarvis as he examines the evolution of the national park idea, featuring parks that represent more than 50 shared American values. 60 pp. Preface: Dayton Duncan

Deer, Elk & Moose

\$2.50

\$29.95

Based on 30 years of studying and photographing deer, elk, and moose, this book covers the natural histories and adaptations of these magnificent animals. 144 pp. Author: Stan Tekiela

Jr. Ranger Backpack, Hat, and Vest

High-quality Jr. Ranger products, designed with the young nature explorer in mind, complement our national parks' Jr. Ranger programs.

Sturdy, feature-rich nylon backpack \$24.95 Poly/cotton hat with chin strap (S, M/L) Poly/mesh zip vest with pockets (youth S, M, L) \$23.95

NOAA Lake Charts \$22.50 paper, \$28.95 waterproof Official navigation charts for Isle Royale, Lake Superior, Grand Portage, the Great Lakes, Keweenaw Peninsula, and Portage Canal. Soundings in feet. Folded or rolled. Add \$4.00 for mailing tube if rolled.

Do Beavers Need Blankets?

Learning about the sleep habits of 13 animal species is sure to surprise young readers. Photographs of real animals make this an attractive and informative book. Hardcover. 32 pp. Author: Stan Tekiela

Cozy Retreat Jigsaw Puzzle Kids will enjoy watching this cute red fox kit emerge as they

assemble this 300-piece puzzle made in the USA. 24"x18"Artist:

Isle Royale National Park **Passport Stamp**

Isle Royale's new custom passport stamp/sticker, designed to fit national park passport books or be used as a sticker, includes additional park information on the packaging.

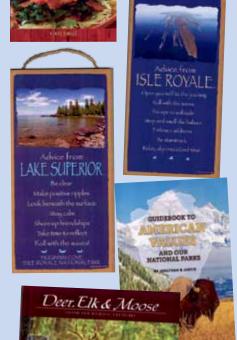
www.irkpa.org 800-678-6925

IRKPA members receive a 10% Discount on all purchases!

Visit our sales outlets at Isle Royale National Park visitor centers on the waterfront in Houghton, Michigan, and on the island at Rock Harbor and Windigo.











Shipping Charges/US Mail: Up to \$5.00 \$5.01 - \$10.00 \$10.01 - \$20.00 \$5.00 \$20.01 - \$30.00 \$7.00 \$30.01 - \$50.00 \$8.00 \$50.0I **-** \$75.00 \$9.00 Over \$75.00 Priority Mail: Add \$4.00 Additional Charges outside U.S.